

U.S. DEPARTMENT OF ENERGY
**Office of Electricity Delivery and
Energy Reliability**



ENERGY ASSURANCE DAILY

September 9, 2005

Highlights/Major Developments

Update: Hurricane Katrina

**OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)
U.S. DEPARTMENT OF ENERGY
Hurricane Katrina Situation Report #30
September 9, 2005 (6:00 PM EDT)**

HIGHLIGHTS

Currently, 607,655 customers remain without electric power in Louisiana and Mississippi due to Hurricane Katrina. This is down by over 2 million from a peak of 2.7 million customers that were without power after Hurricane Katrina struck the region.

This afternoon, the Environmental Protection Agency extended two waivers for the Richmond, VA, and Atlanta, GA, areas. A second reformulated gasoline (RFG) waiver for the Richmond, VA, area was issued due to continued shortages of RFG. The waiver, which expired today, is now extended through September 23, 2005. A second extension was issued for counties in the Atlanta area waiving gasoline RVP and sulfur regulations until midnight on October 5, 2005.

The DOE Energy Information Administration has reported that U.S. gasoline demand fell 4 percent last week, while stocks of gasoline also fell below the average range from the previous week. EIA reports that U.S. gasoline use declined from 9.4 million barrels per day to about nine million barrels per day for the week ending 9/2/05.

The Dixie Propane Pipeline is currently running at full capacity; however, the Hattiesburg, MS, terminal remains without power.

The LOOP expects to be operating at 100 percent within the next week, when Fourchon becomes operational. Currently the LOOP is still operating at 75 percent.

Natural gas transmission pipelines in the path of Katrina survived with minimal damage. Four natural gas processing plants accounting for roughly 5.5 billion cubic feet per day are currently not operating due to hurricane-induced damage. These plants can potentially be bypassed for a period of time while repairs are made with an acceptable impact on natural gas specifications.

Mississippi Power reports that over 90% of those customers who can receive power will be back in service by Saturday. Mississippi Power estimates that about 168,000 of its 195,000 customers will be able to receive service during the initial restoration. Some 27,000 customers are currently unable to receive power. Entergy also reports less than 6,000 of its customers remain without power in Mississippi and that they should have power by 9/10.

According to coal analysts, it is estimated that Hurricane Katrina may impact coal consumption this fall because coal-fired plants that typically ramp down following the peak summer months may be required to continue generating at high levels to make up for the gap caused by damage to gas production.

NOAA continues to monitor Tropical Storm Ophelia located off the coast of Florida. One model suggests it may yet re-intensify and make an Atlantic Coast landfall.

DOE staff are at the National Response Coordination Center (NRCC) at FEMA HQ, the Interagency Incident Management Team at HQ, FEMA Regions IV and VI, and the State Emergency Operation Centers (EOC) in Louisiana and Mississippi.

PETROLEUM AND GAS INFORMATION

According to MMS reports on 9/9, 15.1 percent of 819 manned platforms and 2.99 percent of 137 rigs remain evacuated in the Gulf of Mexico (GOM). Yesterday's shut-in oil production was 898,161BOPD. The shut-in oil production is equivalent to 59.9 percent of the daily oil production in the GOM, which is currently approximately 1.5 million BOPD. Shut-in gas production was 3.829 BCFPD. This shut-in gas production is equivalent to 38.3 percent of the daily gas production in the GOM, which is currently approximately 10 BCFPD. MMS will issue an update on 9/10 at 2:00PM.

Improvement in GOM Shut-in Oil and Gas 8/30/05 – 9/8/05

Date	Percent of GOM Oil Shut-in	Percent of GOM Gas Shut-in
August 30	95.20	87.99
August 31	91.45	83.46
September 1	90.43	78.66
September 2	88.53	72.48
September 3	78.98	57.80
September 4	No data reported	No data reported
September 5	69.57	54.13
September 6	58.02	41.06
September 7	57.37	40.36
September 8		40.20
	60.12 *	
September 9	59.88	38.29

*Oil Production Shut-ins continue to decline, despite the apparent rise in the figures released by MMS. According to MMS, this rise in the statistics occurred today because a company just reported a significant amount of shut-in oil production today that has been shut-in since the hurricane hit, but was not reported as such due to communications problems.

For the first time ever, Entergy Gas Operations in Louisiana has accepted staff from mutual assistance companies including Miller Pipeline of Indianapolis, Centerpoint Energy of Houston, Baltimore Gas & Electric, Peco Energy of Philadelphia, One Oak, Inc. of Austin TX, Mobile Gas from Mobile, Alabama, Avista Utilities from Washington D.C., Laclede Gas of St. Louis, MO, and Connecticut Natural Gas Company.

Natural Gas Processing Plant Status 9/8/05 2:00PM

	Natural Gas Processing Plant	Capacity/ Throughput (2004 avg) (MMcfd)*	Pipeline Feed	Current Status
1	Duke Energy – Mobile Bay, AL	600/172	Dolphin Is, Transco, Gulfstream	Available for service but waiting on pipeline outlet for liquids.
2	BP – Pascagoula, MS	1000/768	Destin	Minor damage, Waiting on power
3	Dynegy – Venice, LA	1300/997	Southern NG, Gulf South, Columbia	Damage. Could take 3-6 months to repair.
4	Dynegy – Yscloskey, LA	1850/1343	Tennessee	Damage. Could take 3-6 months to repair.
5	Enterprise Prod. – Toca, LA	1100/468.4	Gulf South	Assessment ongoing.
6	ExxonMobil – Garden City, LA	630/NA	LA Intrastate, Cypress	Waiting on power
7	ExxonMobil – Grand Isle, LA	115/72	Tennessee	Waiting on power
8	Marathon – Burns Point, LA	200/60	Nautilus, Southern NG	Waiting on power

According to Coast Guard, navigational markers are now in place at Gulfport, MS main shipping channel. The channel is 16 miles long from Gulf of Mexico to the Gulfport.

According to Alabama Port Authority, the Mobile Ship Channel is now open to 43 feet draft and has returned to two-way, 24-hour vessel movement. It will take a minimum of 30 days to restore the Channel to a draft of 45 feet.

The Tables below show, as of 9/9/05, the current status of the refineries impacted by Hurricane Katrina. Four major refineries remain shut down.

Table 1. Shutdown Refineries

Refinery	Location	State	Capacity (bbl/day)	Current Status
ConocoPhillips*	Belle Chasse	LA	247,000	No power - major damage
ExxonMobil	Chalmette	LA	187,200	No power - water damage
Murphy	Meraux	LA	120,000	No power – water is starting to recede, currently making assessment of damage, leaking crude oil tank repaired
Shell Chemical	St Rose	LA	55,000	Awaiting Norco restart
ChevronTexaco*	Pascagoula	MS	325,000	Damage unknown – assessment being made

Table 2. Refineries with Reduced Runs

Refinery	Location	State	Capacity (bbl/day)	Current Status
Motiva (Shell)	Convent	LA	235,000	Restarted – operating at 90 percent rate expect full production later this week.
Motiva (Shell)	Norco	LA	226,500	Restarting

Table 3. Refineries at Normal Production

Refinery	Location	State	Capacity (bbl/day)	Current Status
Shell Chemical	Saraland	AL	80,000	OK
ConocoPhillips	Wood River	IL	306,000	OK
ExxonMobil*	Joliet	IL	238,000	OK
PDV Midwest	Lemont	IL	160,000	OK
Marathon	Robinson	IL	192,000	OK
BP	Whiting	IN	410,000	OK – receiving SPR
Marathon	Catlettsburg	KY	222,000	OK
Citgo*	Lake Charles	LA	324,300	OK
ConocoPhillips*	Lake Charles	LA	239,400	OK
ExxonMobil*	Baton Rouge	LA	493,500	OK – receiving SPR
Marathon	Garyville	LA	245,000	OK
Placid Oil*	Port Allen	LA	48,500	OK – receiving SPR
Valero	St. Charles	LA	185,000	OK
Valero	Krotz Springs	LA	80,000	OK
Marathon	Detroit	MI	74,000	OK
BP	Toledo	OH	160,000	OK – receiving SPR
Marathon	Canton	OH	73,000	OK
Premcor	Lima	OH	158,400	OK – receiving SPR
Premcor*	Memphis	TN	180,000	OK – receiving SPR
ExxonMobil*	Beaumont	TX	348,500	OK
Motiva (Shell)*	Port Arthur	TX	285,000	OK
Premcor	Port Arthur	TX	247,000	OK
Total*	Port Arthur	TX	211,500	OK - receiving SPR

Refineries with company owned and operated on-site power generation.

ELECTRICITY INFORMATION

STATE OUTAGE DATA

Utility	Customers w/o Power	% Customers w/o Power from Katrina
Louisiana*	445,565	40%
Mississippi	162,090	11%

*Louisiana data is reported by the Louisiana Public Service Commission and their percentage outage numbers are used in calculating the percentage of total outage.

STATE REPORTS

Mississippi and Louisiana

In Louisiana 445,565 customers remain without power, as reported by the Louisiana Public Service Commission (LAPSC) (8:00 PM 9/8/05 latest report).

Significant Louisiana Outage Data by Parish (8:00 PM 9/8/05)

UTILITY	OUTAGES	% customers w/o power
Jefferson	121,492	58%
Lafourche	1,925	3%
Livingston	2,497	5%
Orleans	182,152	89%
Plaquemines	3,013	32%
St. Bernard	28,308	99%
St. Tammany	75,193	71%
Tangipahoa	11,518	20%
Washington	17,989	68%

*Louisiana data and percentages are reported by the Louisiana Public Service Commission.
Only Parishes with outages of more than 1,000 customers are shown

Louisiana Outage Data by Utility (8:00 PM 9/8/05)

UTILITY	OUTAGES	% customers w/o power
Entergy Louisiana	169,112	35%
Entergy Gulf States	0	0%
Entergy New Orleans	182,152	89%
DEMCO	1,533	2%
SLECA	362	2%
Wash-St. Tammany	40,650	90%
CLECO	51,756	64%
Total	445,565	40%

*Louisiana data and percentages are reported by the Louisiana Public Service Commission.

As of 2:00 PM 9/9/05, Mississippi had 162,090 customers without power, which represents 11 percent of customers in the state, including 5,472 Entergy customers, 50,988 Mississippi Power customers, and 105,630 customers of the Electric Power Associations of Mississippi (EPAOFMS).

Katrina affected 37,000 square miles, or roughly one third of Entergy's service territory. The storm passed 3,000 miles of transmission lines and 30,000 miles of distribution lines. At its worst point, Entergy had a total of 660 transmission line-miles, 263 substations and 1,560 distribution feeders out of service. A significant portion of New Orleans is flooded and substations will take extended time - months - to restore. Those that are not flooded had widespread damage. Entergy has reenergized six substations within the city and restored distribution on a very limited basis, extensive restoration work remains outside the city that the company will complete first.

In Louisiana, more Entergy crews are moving into the Hammond, Amite and Bogalusa areas. They are also moving resources into the Metro New Orleans area as access permits. Heavy damage, restricted access, and congestion in urban areas will slow the pace of remaining restoration. In New Orleans, crews have made progress toward getting service to some of the city pumping stations and the Central Business District. Several of the large hotels along with Bell South's operations center are energized. Entergy is still several days from being able to begin providing service to the French Quarter.

Entergy reports extensive damage in south Mississippi, with a large number of rural cases that will take an extended time to complete.

Mississippi co-ops report that more than 7,900 emergency work crew members from Mississippi and 17 states are assisting in restoration. These states are: Georgia, South Carolina, North Carolina, Kentucky, Virginia, Ohio, Tennessee, Missouri, Illinois, Indiana, Florida, Pennsylvania, Alabama, Kansas, Iowa, Maryland and Delaware.

Entergy reports extensive resources from around the country helping to restore service. Entergy has more than 10,000 line and vegetation workers, plus support, committed to restoring service. More personnel are arriving and Entergy continues working to bring in additional restoration personnel. See tables below.

Additional Information

Hurricane Katrina Evacuation and Production Shut-in Statistics Report as of Friday, September 9, 2005

Next Report will be issued on Saturday, September 10, 2005 at 1:00 PM CDT.

For information concerning the storm click on www.mms.gov

This survey reflects 56 companies' reports as of 11:30 a.m. Central Daily Time.

Districts	Lake Jackson	Lake Charles	Lafayette	Houma	New Orleans	Total
Platforms Evacuated	0	0	0	7	117	124
Rigs Evacuated	0	0	0	0	4	4
Oil, BOPD Shut-in	0	782	7,670	108,770	780,939	898,161
Gas, MMCF/D Shut-In	0	30.26	14.80	605.38	3,178.21	3,828.65

<http://www.mms.gov/ooc/press/2005/press0906.htm>

These cumulative numbers reflect updated production numbers from all previous reports. The reports only represent input received by 11:30 a.m. CDT. If a company does not report by 11:30 a.m. it is not included in the special information release, but it is included in the cumulative shut-in production. This may result in an apparent increase in the cumulative report amount.

Electricity

TEP's 380 MW Coal-fired Unit 2 at its Springerville Facility in Arizona, Back in Service September 7

The unit had been taken out of service on August 11 because of a faulty control system and problem with a turbine.

Source: Tucson Electric Power

<http://biz.yahoo.com/bw/050908/86049.html?.v=1>

OPG's 490-MW Coal-fired Unit 1 at its Nanticoke Plant in Ontario Shut September 9

Reuters 13:38, September 9, 2005

Exelon's 1112-MW Peach Bottom Unit 2 Nuke in Pennsylvania Shut September 9

Reuters 13:38, September 9, 2005

Duke's 260-MW Gas-fired Unit 1 at its Moss Landing Facility in California Shut September 9

Reuters 16:01, September 9, 2005

Duke's 260-MW Gas-fired Unit 2 at its Moss Landing Facility in California Shut September 9

Reuters 16:01, September 9, 2005

Mirant's 682-MW Gas-fired Unit 7 at its Pittsburg Facility in California Shut September 9

Reuters 16:01, September 9, 2005

Petroleum

Golden Eagle FCC at 100 Percent Capacity

A fluid catalytic cracking unit at Tesoro's 170,000 Golden Eagle refinery in California, which had been off-line since a fire in August, is back in service and operating at 100 percent of capacity.

OPIS 17:57, September 9, 2005.

Gasoline Prices Expected to Drop

According to EIA, U.S. gasoline prices have either peaked or are near peak levels following the impact from Hurricane Katrina. With Gulf Coast refineries, pipelines and production facilities returning to service and gasoline imports picking up over the next couple of weeks, gasoline prices will likely drop. It may be awhile, however, before retail prices return to pre-hurricane levels.

<http://www.platts.com/Oil/News/6079813.xml?S=n>

Enbridge to Construct Oil Sands Pipeline in Alberta

On September 9, Enbridge Inc announced that it had received shipping agreements for its proposed pipeline to bring crude oil from the Alberta tar sands operations to be refined in Edmonton. Initial capacity will be 350,000 b/d with expansion planned to bring the total to 600,000 b/d. Pending regulatory approval, the line is scheduled to be operating in mid-2008.

http://biz.yahoo.com/ap/050909/enbridge_pipeline.html?.v=1

El Paso Uses Barge to Refuel Choppers Making Damage Assessment Runs

To speed the damage assessment of its extensive offshore facilities, El Paso Corp is making use of a mobile barge so that everything needed to assess damage from hurricane Katrina is readily at hand. Helicopters can be refueled and the materials needed to support divers, assess damage, and even provide first aid are all available without the time-consuming step of returning to the mainland.

http://pro.energycentral.com/professional/news/power/news_article.cfm?id=5937363

Valero May Delay Fall Maintenance

A Valero spokesman indicated that it would delay any scheduled refinery maintenance that it can in order to maintain higher production in the wake of Hurricane Katrina.

Reuters 12:44, September 9, 2005

Harken Energy – Damage Assessment

Gulf Energy Management Company, a wholly owned subsidiary of Harken Energy Corporation, reported on September 8 that approximately 75 percent of its total production had been shut-in in preparation for the approach of hurricane Katrina and that as of September 8 production was running at 55 percent of the pre-storm level. The damage assessment of its remaining facilities including Main Pass, Point a la Hache, Branville Bay and Lapeyrouse, is continuing. Gulf Energy also indicated that restoration of those facilities depends on resumption of downstream infrastructure and the availability of service and equipment contractors necessary for over-water transportation and repairs.

Source: Harken Energy Corp.

<http://biz.yahoo.com/iw/050908/094851.html>

Newpark Resources – Damage Assessment

Newpark Resources Inc., foresees that 80 percent of its pre-storm operations will be restored by the end of September. However, the company which provides services to oil and gas drilling companies, indicated that its facilities in Venice, Louisiana, although not severely damaged, will remain closed until further notice as a consequence of the extensive damage to support infrastructure in the area.

http://biz.yahoo.com/ap/050908/newpark_resources_katrina.html?.v=1

Update - Rowan – Damage Assessment

The Rowan Companies announced on September 7 that only one of its rigs sustained other than what appears to be minimal damage. The single exception was its LeTourneau 52-class slot jack-up rig which sank off of Louisiana. The company estimates that it will cost more than \$5 million to remove the wreckage.

http://biz.yahoo.com/ap/050907/rowan_katrina.html?.v=1

Update – Shell Damage Assessment

According to a company press statement, the Convent refinery is up to 90% of capacity, and the Norco refinery began to restart and should be at full production in the next several days. Shell Chemical at Mobile, Alabama is “nearly fully operational.” Only about 60% of Royal Dutch Shell Company’s total upstream production is expected to be restored to pre-Hurricane Katrina levels in the fourth quarter. Shell indicated that restoration of the remainder of the production from its Mars, Ursa, Mansa, and Cognac projects may not be feasible during the fourth quarter.

Source: NGI's Daily Gas Price Index posted Sep 9, 9:40 AM

<http://intelligencepress.com/>

Reuters 11:45, September 9, 2005

Reuters 3:31, September 9, 2005

Reuters 4:24, September 9, 2005

Ruptured Oil Tanks May Have Spilled More than 3 Million Gallons

Officials at the Louisiana Department of Environmental Quality estimate that tanks at the Bass Enterprises Production facility at Cox Bay, Louisiana ruptured by Hurricane Katrina may have spilt as much as 3.3 million gallons of crude oil. Because the tanks were not full at the time and since access to the site remains difficult, a more exact estimate of the volume of the spill is unavailable.

<http://news.ft.com/cms/s/c1c6698e-20ab-11da-81ef-00000e2511c8.html>

For additional information on petroleum, see Highlights/Major Developments

Natural Gas

Duke Seeks FERC Approval for Lateral in Virginia - Seeking FERC Authorization

On September 8, Duke Energy's East Tennessee Natural Gas pipeline filed an application with FERC, seeking its approval for the construction of its Jewell Ridge Lateral, a 32-mile, 20-inch diameter lateral pipeline that will connect the East Tennessee Natural Gas pipeline system to Virginia-based CNX Gas Co.'s Cardinal States Gathering System pipeline. The company expects the line to be in service in the summer of 2006.

Source: Charlotte Business Journal

<http://biz.yahoo.com/bizj/050909/1162364.html?.v=1>

For additional information on natural gas, see Highlights/Major Developments

Other News

Update – Railroads Resume Service to Port of Mobile

According to an Alabama Port Authority representative, rail service to the Port of Mobile was restored by the afternoon of September 6 by the Canadian National Railway, BNSF Railway, Norfolk Southern Railroad, Kansas City Southern Railroad, and CSX Corp.

<http://www.platts.com/Coal/News/6078242.xml?S=n>

Energy Prices

	Latest (09/09/05)	Week Ago	Year Ago
CRUDE OIL West Texas Intermediate US \$/Barrel	64.21	66.91	44.53
NATURAL GAS Henry Hub \$/Million Btu	11.03	11.75	4.57

Source: Reuters

This Week in Petroleum from the Energy Information Administration (EIA)

<http://tonto.eia.doe.gov/oog/info/twip/twip.asp>

Updated on Wednesdays

Weekly Petroleum Status Report from EIA

http://www.eia.doe.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html

Updated after 1:00pm (Eastern time) on Wednesdays

Natural Gas Weekly Update from EIA

<http://tonto.eia.doe.gov/oog/info/ngw/ngupdate.asp>

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<http://ensec.blogspot.com>